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EMERGENT FEARS DURING TREATMENT OF THREE OBSESSIVE COMPULSIVES: SYMPTOM SUBSTITUTION OR DECONDITIONING?

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Summary—The emergence of new fears during treatment by flooding of three obsessive compulsives is described, and its theoretical implications are discussed. Two characteristics which differentiate these patients from others are their initial failure to anticipate disastrous or shameful consequences and the unusually rapid extinction of the originally reported fears. Their initial unawareness of these fears seems to result from conditioned inhibition. The originally reported fears and the emergent ones belonged to the same theme, the former occupying the lower part of the hierarchy and the latter the higher part. Emergence of these fears was facilitated by generalization of deconditioning along the treated dimension.

Interest in the effectiveness of behavioral techniques for the treatment of obsessive compulsive disorders has increased recently (e.g. Foa and Tillmanns, in press; Marks, Hodgson and Rachman, 1975; Meyer, Levy and Schnurer, 1974; Mills, Agras, Barlow and Mills, 1973). These studies have devoted more attention to ritualized behavior than to the obsessional thoughts that usually accompany them. Such thoughts were described by Rachman (1971) as "distasteful, shameful, worrying or abhorrent" including thoughts of "harming others . . ., causing accidents to occur, swearing, or distasteful sexual or religious ideas" (p. 229).

Twenty-one obsessive compulsives were treated in the Behavior Therapy Unit at Temple University, by *in vivo* and imaginal flooding coupled with response prevention (Foa and Goldstein, in preparation; Foa and Tillmanns, in press). Three patients in this population were initially unaware of any disastrous or shameful consequences that would follow abstention from ritualistic behavior. In four sessions during which a detailed behavior analysis was conducted, the patients denied the existence of such thoughts in spite of specific questions by the therapists. Shameful or catastrophic material emerged, however, during the course of treatment and was accompanied by the appearance of anxiety to stimuli which previously had not elicited discomfort. By contrast, no new rituals appeared. The purpose of this paper is to describe these three cases and to discuss some theoretical issues they raise.

DESCRIPTION OF THE PATIENTS

All three patients were treated in an outpatient setting. They received 2-hr daily sessions, 5 times per week for a total of 10 sessions (2 weeks). Case 1 had 10 additional weekly sessions of assertiveness training; Case 3 had 25 additional weekly sessions which focused on adjustment to work, social situations, and living separately from her parents. Case 2 did not receive any additional treatment.

Case 1

John was a 29 year old divorced man who lived with a girlfriend and wa employed as a laboratory research physician. Compulsive washing was precipitated by contact with any item that had been in direct or indirect contact with the city where he had attended medical

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school. The symptoms had begun in that city nine years prior to treatment and were first related to germs which might cause facial lesions. Later, they became attached to radioactive material following a mild spill of a radioactive substance in a medical school laboratory. When asked directly, John stated that he no longer felt contaminated by germs or radioactive material and in fact was exposed to both repeatedly with no anxiety, feeling of contamination or urge to wash afterwards. The stimulus which caused the greatest contamination and discomfort was direct contact with the medical school laboratory. Other stimuli varied in their potential to elicit anxiety in direct relationship to the degree of contact they had with that laboratory.

After two sessions of imaginal and *in vivo* exposure to material from the city in which the contamination began, considerable extinction of anxiety and feelings of contamination was achieved. At this point John began to notice that certain stimuli, particularly laboratory animals with which he had daily contact, began to evoke anxiety accompanied by fears that he would contract a disease from these animals. John became aware that his worst fears were of contracting a slow terminal disease which would render him completely helpless and physically deformed. Following this realization, John reported that the most anxiety evoking stimuli was touching a patient with leukemia or some other form of incurable cancer. Again, previous contacts with such patients had not evoked feelings of anxiety or contamination. After an additional eight sessions of daily flooding (exposure) to these stimuli, coupled with response prevention, he considered himself 90% improved.

Case 2

Anna was a 58 year old single Catholic woman who was living with her parents at the time she began treatment. In addition to checking rituals which started 30 years prior to treatment, she felt compelled to pray after having sexual thoughts. The amount of praying varied directly with the amount of discomfort evoked by the thoughts. She avoided many social situations and T.V. programs or movies for fear of being exposed to sexual material and consequent sexual thoughts. The most anxiety evoking thought was having intercourse after which she felt compelled to pray extensively. No shame, guilt or fear of being punished was associated with the sexual thoughts.

After two days of prolonged exposure to pornographic pictures and flooding to imagery of having intercourse, coupled with blocking of the praying response, discomfort with sexual material decreased considerably. The next day Anna experienced for the first time a visual image of Christ standing in front of her with large sexual organs bulging noticeably underneath his robes. This image was followed by fantasies of having sexual intercourse with Christ which were associated with shame and fears of being punished by God. She had never had these fantasies prior to treatment by flooding. After six additional sessions of flooding to images of having intercourse with Christ and being punished by God, the urge to pray after having sexual thoughts and the discomfort associated with them extinguished. She exposed herself to sexual stimuli, including those appearing in movies and T.V. programs, without discomfort. Other untreated rituals did not disappear.

Case 3

Susan was a 25 year old single woman who lived with her parents at the time of treatment. A washing compulsion had begun two years prior to treatment accompanied by feelings of contamination from direct contact with her mother or with any item touched by both her and her mother. She reported being most fearful of touching the clothes hamper which her mother also had to touch and of having her mother touch her bed. After four days of exposure to a variety of contaminated items including prolonged body contact with her mother, anxiety had extinguished completely to all situations previously felt to be con-

taminating. The hamper and her mother's contact with her bed required two additional days of exposure before substantial reduction of discomfort was reported. At this point other fears and feelings of contamination developed, including touching her vagina, breasts, anal area, her underwear and towels. She then became aware that her fear of touching her mother as well as her new fears stemmed from homosexual desires associated with anxiety and shame. Masturbation and touching her own body was considered by Susan as a form of homosexuality (having sex "with herself" was equated with having sexual relations with another woman). Prior to this realization she masturbated regularly with no feeling of contamination or shame and had not been aware of homosexual desires. After exposure to the new discomfort - arousing stimuli for four additional sessions, Susan considered herself 95% improved.

None of the three patients developed additional new fears once their shameful or disastrous obsessions were realized and treated.

Emergent fears. The two washers insisted that they had no previous awareness of discomfort or feelings of contamination associated with the emerging anxiety evoking stimuli, despite continual contact with them before treatment. Anna had not been aware of the "shameful" desire to have intercourse with Christ nor was she aware of feeling ashamed of sexual thoughts or fear of being punished by God.

None of these three patients reported changes in symptoms during dynamic psychotherapy that each had received before coming to our clinic. In the course of flooding the emergent fears appeared after discomfort associated with the previously reported stimuli decreased. In all three cases the presenting and emergent anxiety-arousing stimuli belonged to the same domain; sickness in the first case, sexuality in the second, and homosexuality in the third.

Differential characteristics. The three patients described here differed from the other obsessive compulsive patients who were treated in our clinic on two counts. First, during the behavioral analysis, none of the three expressed expectations of disastrous or shameful consequences on exposure to the fearful stimuli. Second, in all three cases discomfort to the originally reported stimuli extinguished with unusual rapidity. On the third day of treatment John reported almost no discomfort or contamination when touching items that had previously aroused 75-85 suds (subjective units of disturbance, Wolpe, 1973, p. 120). Moreover, on that day he expected a direct contact with the lab to elicit only 30 suds as opposed to 100 suds before treatment. Actual exposure to the lab was delayed to the sixth day due to the therapist's schedule. This contact evoked initially only 20 suds; anxiety diminished after a few minutes to 5 suds. Anna reported 90 suds associated with thoughts of having intercourse before treatment and only 10 suds after two days of flooding. Susan felt initially 95 suds when her hands came in contact with her mother. On the second day she expected such contact to elicit 20 suds; on the third day she actually touched her mother and reported 5 suds or below.

In contrast to this rapid extinction of discomfort observed in these three patients, other obsessive compulsive patients reported substantial diminution of discomfort to the highest items on the hierarchy only after eight to ten treatment sessions. At the third session eleven other obsessive compulsives still experienced high anxiety even to imagery contact with the disturbing stimuli. The mean duration of experiencing 70 suds or above was 38 min in 70 min of continuous flooding in imagery (Foa and Chambless, in press).

SOME THEORETICAL CONSIDERATIONS

Traditionally the emergence of other fears during or after treatment has been denoted by the term "symptom substitution". Psychoanalysts, notably Fenichel (1945), used it to describe the "repression of symptoms" and the formation of new ones. Behaviorists have dealt with the phenomenon of emerging

fears with two concepts, avoidance behavior (Cahoon, 1968) and conditioned inhibition (Wolpe, 1958).

Avoidance behaviors, within an operant conditioning model, are responses negatively reinforced by the termination or reduction of an aversive stimulus. As noted by Skinner (1953), "As the result of punishment, not only do we engage in other behavior to the exclusion of punished forms, we engage in other behavior to the exclusion of *knowing about* punished behavior" (p. 291). The presenting fears, it may be postulated, were maintained because they prevented contact with the emergent more aversive ones (Furst and Cooper, 1970; Stampfl and Levis, 1967).

In support of the avoidance response hypothesis, Fransella (1974) discusses the evidence that obsessive compulsive persons limit their perceptual field in order to avoid pain, a position consistent with Beech and Liddell's (1974) suggestion that obsessive compulsives have greater than normal sensitivity to aversive events. Constriction of the perceptual field could then lead to the exclusion from awareness of aversive thoughts. Teasdale (1974) proposed indeed that some mental events "are maintained on an avoidance conditioning paradigm" (p. 222). Specifically, he hypothesized that the presence of an aversive thought would be less disturbing than waiting for the thought to strike. The same paradigm may be applied to the three cases reported here—having a particular disturbing thought is obviously less aversive than having a more disturbing one.

The notions of symptom substitution and of avoidance response suffer from a common limitation; neither of them predicts if or how the emergent stimuli will be related to the originally reported ones, nor do they explain why other fears emerged during treatment.

This limitation is also apparent in Stampfl and Levis (1967) conceptualization of implosion therapy. These authors discussed the occasional reappearance of memories heretofore below the awareness of patients undergoing implosion treatment. In detailing the Avoidance Serial Cue Hierarchy, they commented that the lowest items on the hierarchy were those most readily identifiable by the patient, implying that higher items may have been cognitively unavailable to him at the commencement of treatment. They noted that frequently a reduction in anxiety after implosive treatment was followed by a recall of material "which the patient maintains he previously had forgotten completely" (p. 501). The relationship between the identifiable cues and the recalled material, however, has not been specified by the authors, despite the use of the word "hierarchy".

Instances of recalling forgotten events during behavioral treatment were reported by Thompson (1971) for a phobic patient, and by Rackensperger and Feinberg (1972) and Boulougouris and Bassiakos (1973) for obsessive compulsives. In the first two cases systematic desensitization was employed; the latter case was treated by flooding. In all three reports the presenting fears and the emerging memories belonged to the same domain, as was the case for the three patients reported here.

Wolpe (1958) stated that amnesia of emotionally charged events is "one more of the conditionable occurances in the neurotigenic situation" (p. 94). Certain thoughts or images of the three cases described above as well as the three cases reported in the literature may have become so emotionally charged as to result in conditioned inhibition of their recall. Treatment by flooding or desensitization reduces the anxiety associated with the *reported* fears. This reduction, in turn, generalizes to the *inhibited* ones, which then become available to the patient for reporting. To illustrate this process let us consider the case of John. Figure 1 depicts his subjective level of anxiety at various times during the course of treatment, for each of eight anxiety-evoking stimuli. These stimuli are listed below in order of increasing potential for evoking anxiety:

(1) Local laboratory furniture
(2) Change from local hospital cafeteria

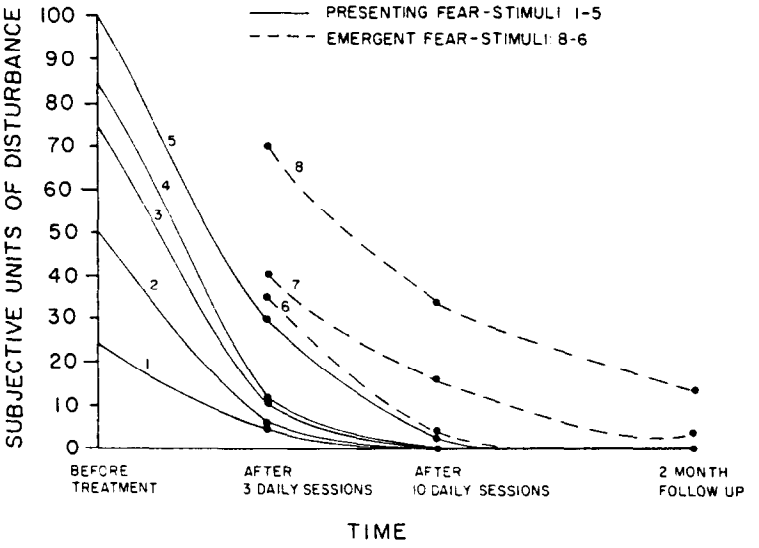

Fig. 1. Subjective anxiety levels reported by John for various disturbing stimuli at three stages of treatment and follow-up.

(3) Letter from medical school
(4) Couch sat on by medical school student
(5) Medical school laboratory
(6) Head of balding man
(7) Laboratory animals
(8) Leukemia patient

Figure 1 shows that the anxiety evoked by the presenting stimuli (1-5) decreased considerably by the third day of treatment. At this time the three different stimuli (6-8) emerged, occupying the higher part of the hierarchy while the presenting fears occupy the lower part.

Generalization of anxiety reduction is described by Wolpe (1973) as follows: "Once a stimulus of weak anxiety has ceased to arouse any anxiety, it is possible to present a somewhat 'stronger' one . . . and this 'stronger' stimulus will now evoke less anxiety than it would have before" (p. 102). The "weak" and the "stronger" stimuli belong to the same anxiety hierarchy defined as "a list of stimuli *on a theme* (italics ours), ranked according to the amount of anxiety they evoke" (Wolpe, 1973, p. 108).

It appears therefore that for generalization to occur the presenting and the emerging stimuli should belong to the same hierarchial continuum. Because of the common dimension, the same compulsions were also effective in reducing anxiety to those stimuli outside awareness; indeed, no new rituals emerged.

The emergence of other fears during treatment is not a common finding among obsessive compulsives. In our sample it was observed in 15% of the cases. The two characteristics, no expectation of disastrous consequences and rapid extinction of the initial fears, may alert the therapist to the possible existence of high-anxiety evoking stimuli which are beyond the patient's awareness.

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